

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000721510015-9

L 24349-66 EWT(1)/EWP(m)/EWA(d)/ETC(m)-6/EWA(1) WW/JXT(CZ)

ACC NR: AT6006424

SOURCE CODE: UR/3149/65/000/002/0173/0178

AUTHOR: Kel'manson, I. A.; Ustimenko, B. P.

54

ORG: None

TITLE: Solution of problems on the propagation of rotational jets by the integral method

SOURCE: Alma-Ata. <u>Kazakhskiy nauchno-issledovatel'skiy institut energetiki</u>. Problemy teploenergetiki i prikladnoy teplofiziki, no. 2, 1965, 173-178

TOPIC TAGS: rotational flow, fluid flow, flow propagation, homogeneous flow, jet flow

ABSTRACT: The <u>fluid flow mechanism in rotational jets</u> is the object of widespread interest, due to its extensive application in furnace technology, gas turbine combustion chambers, etc. The theoretical solutions available pertain to slightly rotational jets, the distinguishing feature of which is the absence of reverse currents. Some investigators construct the solution by the method of series expansion, others construct self-similar solutions. Highly rotational jets offer the greatest practical interest, but have not been studied theoretically. Furthermore, very few studies have been devoted to the problems

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of the propagation of compressible rotational jets, particularly the mechanisms of the propagation of turbulent rotational jets, where no reliable data exist on the propagation of the transfer coefficients and the shearing friction stress. In view of this, it is of considerable interest to obtain new theoretical and experimental data on the study of rotational jets. The present article presents the solution to the problem of propagation of a free, inuvdated, rotational jet and a rotational jet in a secondary homogeneous flow. The solution is constructed by the integral method. The results of the calculations are compared with solutions found in the literature. Orig. art. has: 5 figures and 9 formulas.

SUB CODE: 20/SUBM DATE: none/ORIG REF: 008/OTH REF: 001

Card 2/2

KEL'MANZON, K.M.

Rapid selection of antitumor substances. Vop.onk. 9 no.1: 45-48 '63. (MIRA 16:5)

1. Iz laboratorii eksperimental'noy onkologii (zav. - zasluzhennyy deyatel' nauki prof. N.V.Lazarev) Instituta onkologii AMN SSSR
(direktor -deystvitel'nyy chlen AMN SSSR prof. A.I.Serebrov).
(CYTOTOXIC DRUCS)

IZHAK, I.G.; KEL'MANZON, S.K.; IZOTOVA, N.V.

Determination of the total fat by the trilonometric method, and analysis for excess alkalinity in diluted soaps. Zav.lab. no.11: 1299-1300 '59.

1.Konbinat "Apatit". (Soap-- Analysis)

KELHER SURMANE, Given Names Country: Rumania Academic Degrees: [not given]. Affiliation: -not given-Source: Bucharest, Rovista de Chimie, Vol 12, No 9, Sop 1961, pp 538-543. Pata: "Pipos and Containers of Polyvinyl Chloride in Drinking Water Networks." Authors: CONSTANTINESCU, A. IONESCU-MUSCEL, I. CORNILESCU, D. COTIGARU, B. KELMER, I IONESCU-MUSCEL, M. RADULESCU, P. MIRCEA, C. 670 961643 स्थाप्त_{नस}्या

GUTERMAN, V.M.; GARBER, M.Ye.; GAMOL'SKAYA, Z.M.; Prinimali mehastiye: ZELIKMAN, I.D.; TOYPIN, I.I.; KEL'MANSON, V.I.; KISELEVA, V.S.; HIKHAYLOVSKAYA, S.S.; GRINEERG, A.Ya.; MARKIN, I.S.

Raising the wear resistance of equipment parts operating in a hydraulic abrasive medium. Ugol' 39 no.9:61-63 5 '64. (HTRA 17:10)

1. Vsesoyuznyy nauchno-issledovateliskiy i proyektno-tekhnologichoskiy institut ugolinogo mashinostroyeniya.

IONESCU-MUSCEL, I., prof. ing.; KEIMER, I., ing.; COTIGARU, B., ing.; RUSAMOVSCHI, Maria, ing.; GHENCEA, M., ing.; COSTENCIUC, N., ing.; GHERSIN, B., ing.; MATEI, Ana, ing.; IONESCU-MUSCEL, C., ing.; NACA, M., ing.

Contributions to the problem of wool washing under optimum temperature and pH conditions. Ind text Rum 13 no.5:197-203 My 162.

1. Institutul de stiinte economice V.I. Lenin (for Ionescu-Muscel, I., Kelmer, Cotigaru). 2. Leboratorul central Ministerul Industriei Uscare (for Rusanovschi, Ghencea). 2. Fabrica Textila Grivita (for Costenciuc, Ghersin). 4. Ministerul Industriei Petrolului si Chimiei (for Matei). 5. Institutul de Oncologie (for Ionescu-Muscel, C.). 6. Fabrica Klectrotehnica (for Nacu).

CONSTANTINESCU, A.; IONESCU-MUSCEL, I.; CORNILESCU, D.; COTIGARU, B.;
KEIMER, I.; IONESCU-MUSCEL, M.; RADULESCU, P.; MIRCEA, C.

Conduits and receivers made of polyvinyl chloride in drinking water networks. Rev. chimie Min petr 12 no.9:538-543 S'61

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721510015-9"

CONSTANTINESCU, Anton, prof.ing.; IGNESCU-MUSCEL, Iosif, prof.ing.; CORNILESCU, Dan,ing; COTIGARU, Buium, lector ing.; KELMER, I., lector ing.; IONESCU-MUSCEL, Mircea, ing.; CUCU, Virgil, ing.

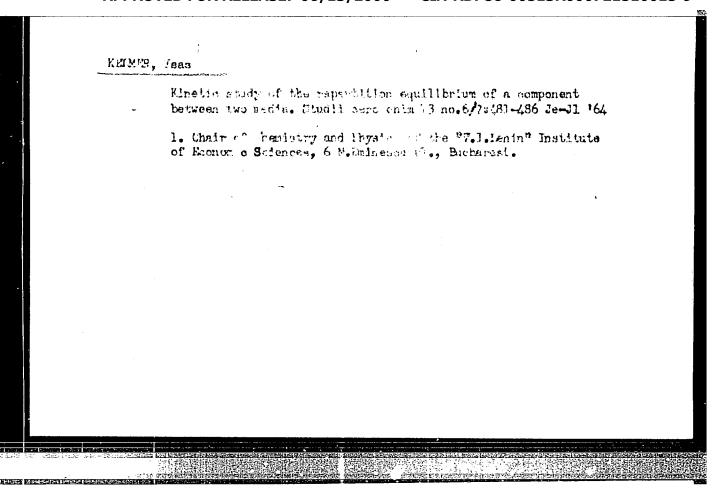
Stabilizers of polyviyl chloride, made in Rumaria. Industria usoara 8 no.12:460-463 D '61.

IONESCU, Muscel, I., prof.; COTIGARU, B., lector; KELMER, I., lector; REBEDEA, C., lector; MOLDOVAN, I., ing.; BORSATTI, M.; IONESCU, Muscel-Ianculescu, M., ing.; GREAVU, V., ing.

Importance of the economist expert in the science of commodities in the improvement and quality control of products. Industria usoara 10 no.8:356-360 Ag '63.

IONESCU-MUSCEL, I., prof. ing.; KEIMER, I., lector ing.; COTIGARU, B., lector ing.; RUSANOVSCHI, Maria, ing.; GHERSIN, B., ing. CONSTENCIUC, N.

Regarding the pH of the wool washing liquid. Ind text Rum 14 no.11:532-533 N*63.



ZAL'NOVA, N.S.; ZHUTNITSKAYA, E.A.; STROMSKAYA, T.F.; KEL'METOVA, A.A.

Treatment of necatoriasis with naphthemon (alcopar). Med.paraz.
i paraz.bol. no.5:515-518 '61. (MIRA 14:10)

1. Iz klinicheskogo otdela Instituta meditsinskoy parazitologii i tropicheskoy meditsiny imeni Ye.I. Martsinovskogo (dir. instituta - prof. P.G. Sergiyev, sav. btdelom - prof. N.N. Plotnikov), sanitarno-epidemiologicheskoy stantsii Moskvy (glavnyy vrach M.S. Sokolovskiy) i polikliniki No.25 Moskovskogo gorodskogo otdela zdravookhraneniya (glavnyy vrach N.T. Sidorchuk).

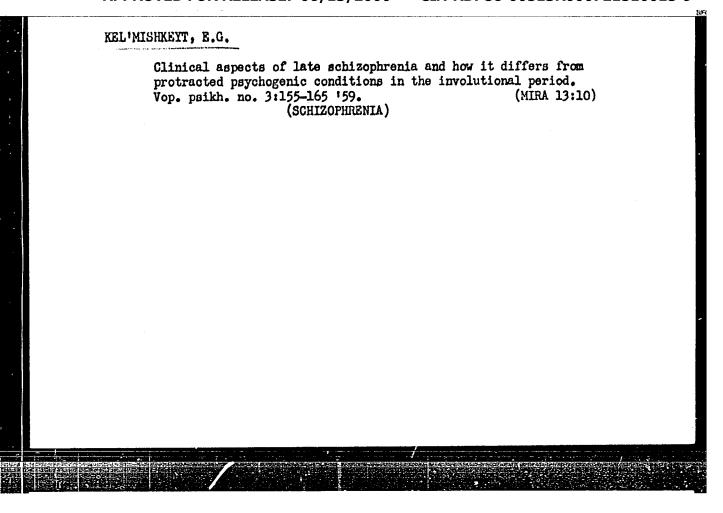
(WORMS, INTESTINAL AND PARASITIC) (AMMONIUM COMPOUNDS)

LIUKSEMBURGAS, K.; KELMINSKIENE, S.; RADECKIS, G.

On reactive properties of a divaccine (against typhoid and paratyphoid B fevers) of the Gamaleia Institute of Epidemiology and Microbiology of the Academy of Medical Sciences of the USSR. Sveik. apsaug. no.ll: 25-31 '62.

1. Vilniaus Epidemiologijos ir higienos m. t. institutas, Vilniaus m. san. epid. stotis ir Vilniaus m. II ligonine.

(TYPHOID PARATYPHOID VACCINES)



SKVORTSOV, K.A.; CALENKO, V.Ye.; ORLOVSKAYA, D.D.; KEL'MISHKEYT, E.G. Preliminary data on the use of new drugs in psychiatric practice. (MIRA 13:10)

Vop. psikh. no. 3:234-248 159. (DRUGS) (PSYCHIATRY)

GALENKO, V.Ye.; KEL'MISHKEYT, E.G.

Treatment of patients with a paranoid form of schizophrenia.

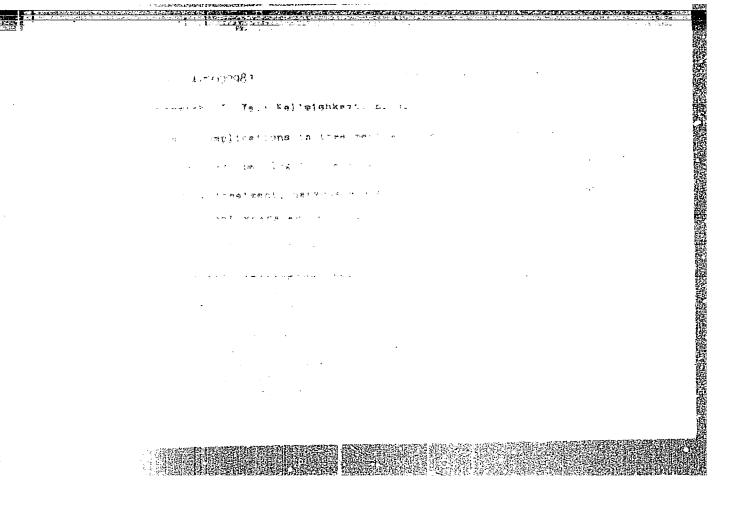
Zimr. nevr. i psikh. 63 no.2:269-275 '63. (MIRA 16:11)

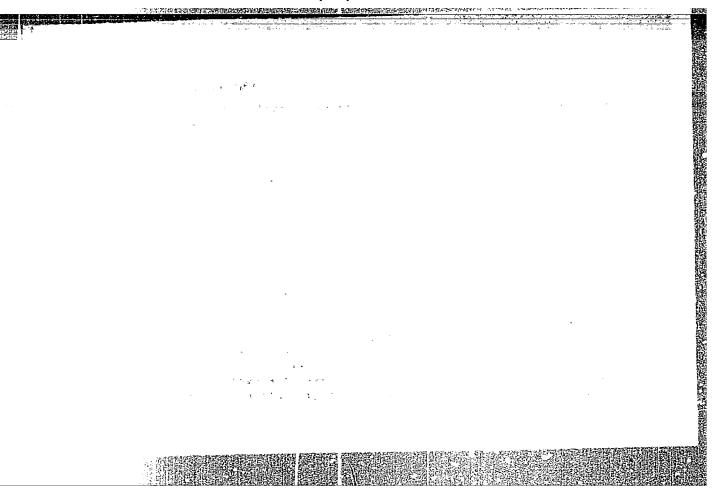
1. Institut psikhiatrii AMN SSSR, Moskva.

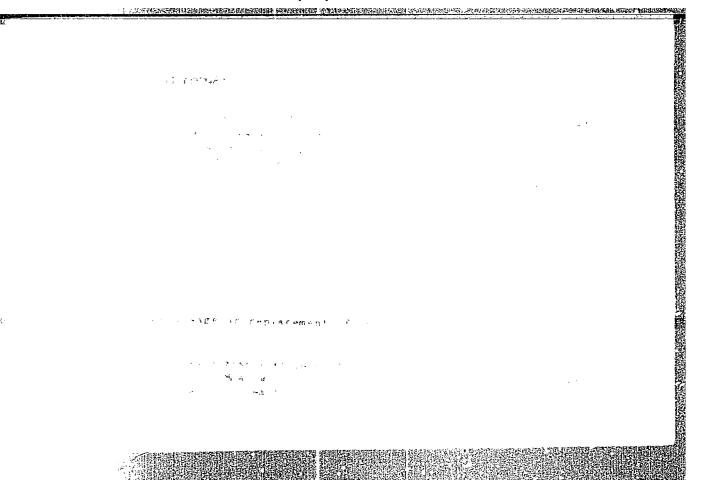
KEL'MISHKEYF, E.G.

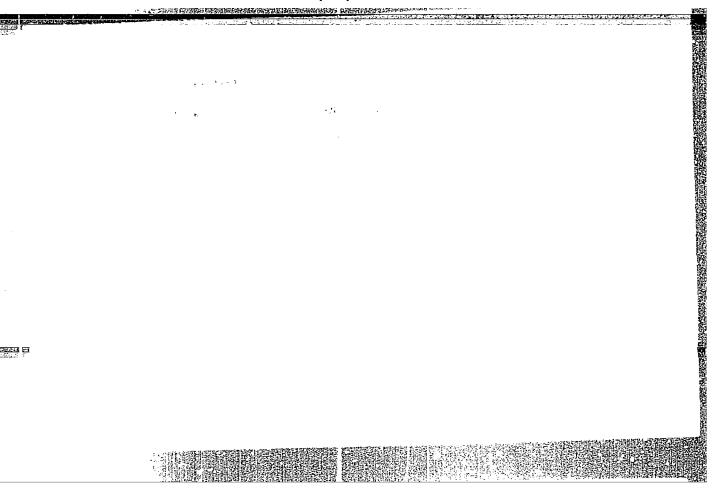
Slight transitory dimming of consciousness in prolonged treatment with neuroleptic substances. Vop.klin., patcg. i led shiz. no.1856-58 *64. (MIRA 18:5)

1. Otdel psikhozov pozdnego vozrasta (zav. - prof. S.G.Zhislin) Gosudarstvennogo nauchno-issledovatel skogo instituta psikhiatrii Ministerstva zdravookhraneniya RSFSR.









GUREVICH, I.Ya.; KEL'MISHKEYT, E.G.

Some complications in the treatment with psychotropic substances. Zhur. nevr. 1 psikh. 64 no.10:1564-1571 '64.

。这一个是中国的时候,但是我的对象的现在分词是对这种的对象的。

(MIRA 17:11)

1. Klinika vozrastnykh psikhozov (zaveduyushchiy S.G. Zhislin) Instituta psikhiatrii (direktor D.D. Fedotov) Ministerstva zdravookhraneniya RSFSR, Moskva.

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721510015-9"

L 9898-63 EWP(q)/BDS/EWT(m)--AFFTC--JD/WB ACCESSION NR: AP3000412 S/0076/63/037/005/1037/1042

AUTHOR: Tsvetnova, R. V.; Dyatkina, S. L.; Sheremet'yeva, S. N.; Kel'n, A. R.; Krasil'shchikov, A. I.

TITLE: Corrosion and passivity of titanium in sulfuric acid solution 57

SOURCE: AN SSSR 2 Zhurnal fizicheskoy khimii, v. 37, no. 5, 1963, 1037-1042

TOPIC TAGS: corrosion, passivity of titanium, electrochemical behavior of Ti; passivating adsorption layer

ABSTRACT: The electrochemical and corrosion behavior of Ti in 5 and 10 N sulfuric acid solutions, alone and in the presence of additions of potassium iodide, tetraethylammonium iodide, copper sulfate and nitric acid, in a nitrogen atmosphere, has been investigated by the potentiometric and discharge curve methods, as well as by gravimetric determination of the corrosion losses. Passivation is impeded by raising the temperature. The addition of I sup -, Cu sup 2+ and HNO sub 3 retards anodic solution of Ti in H sub 2 SO sub 4 and facilitates initial passivation of the metal. It is suggested that the

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L 9898-63

ACCESSION NR: AP3000412

passivity of Ti is due to the formation of a passivating adsorption layer on its surface. Orig. art. has: 3 equations, 1 table, 8 figures.

ASSOCIATION: Gosudarstvenniy nauchno-issledovatel'skiy i proektniy institut azotnoy promy*shlennosti (State Scientific Research and Design Institute for Nitrogen Industry)

SUBMITTED: 22Jan62 DATE ACQ: 19Jun63

ENCL: 00

SUB CODE: 00

NR REF SOV: 011

OTHER: 006

KELMAR, A.

Graphic determination of hydraulic values for water flow in circular pipelines at various water levels. p. 121.

Vol. 35, no. 4, Apr. 1956 VODA Praha, Czechoslovakia

Source: Mast Agropean Accession List. Library of Congress Vol. 5, No. 8, August 1956

KELNAR, Bretislav, inz.

New methods in serial reproduction of plastic maps. Good kart obzor 9 no. 5: 143-144 My '63.

1. Kartograficky a reprodukcni ustav, Modra-Harmonia.

KEINAR, O., inz. CSc.; KOHOUTOVA, D., inz.

Flashover voltage of long chains of the VZC insulators.
Bul EGU no. 5:16-18 '63.

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721510015-9"

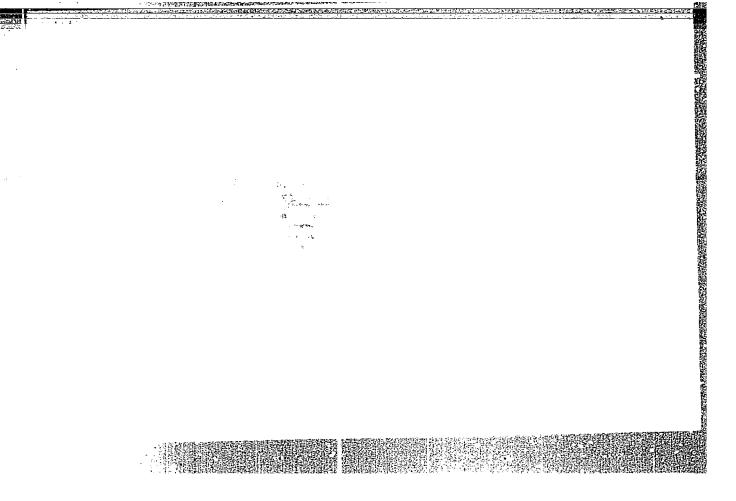
KELNAR, Oldrich, inz. CSc.

Behavior of long insulator chains during arc short circuits. El tech obzor 53 no. 5:252-254 My '64.

1. Extra High-voltage Laboratory, Research Institute of Power Engineering, Bechovice.

KEINAR, O., inz. CSc.; KOHOUTOVA, D., inz.; VOKALEK, J., inz.

Expected radio interference of the 400 kv line built in Czechoslovakia. Bul EGU no. 5:18-22 '63.



KELNAR, Oldrich, inz. CSc.

Capacita Superioration of the Land

Use of the 2007 type suspension insulators for 110 kv networks. Energetika Cz 14 no.5:235-236 My 164.

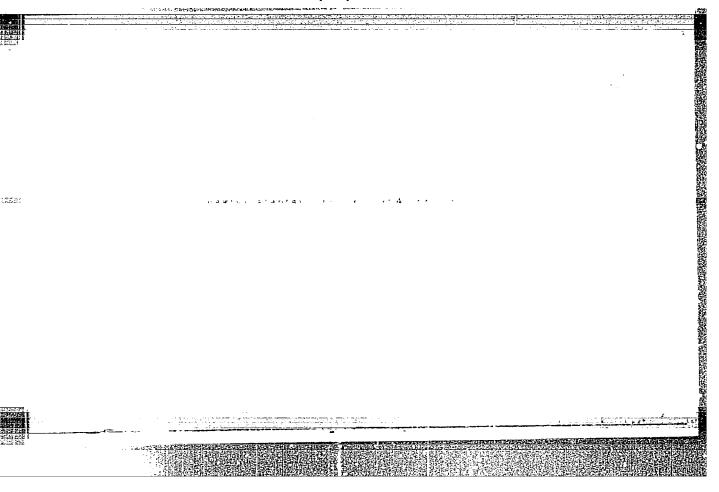
1. Extra-high-voltage Laboratory, Power Research Institute, Bechovice.

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721510015-9"

KELNAR, Oldrich, inz. CSc.; KOHOUTOVA, Dana, inz.

Use of protective fittings in chains of cap insulators of 220 kv and 400 kv lines. Energetika Cz 14 no. 3: 134-137 Mr '64.

1. Extra-high Voltage Laboratory, Power Research Institute, Bechovice.

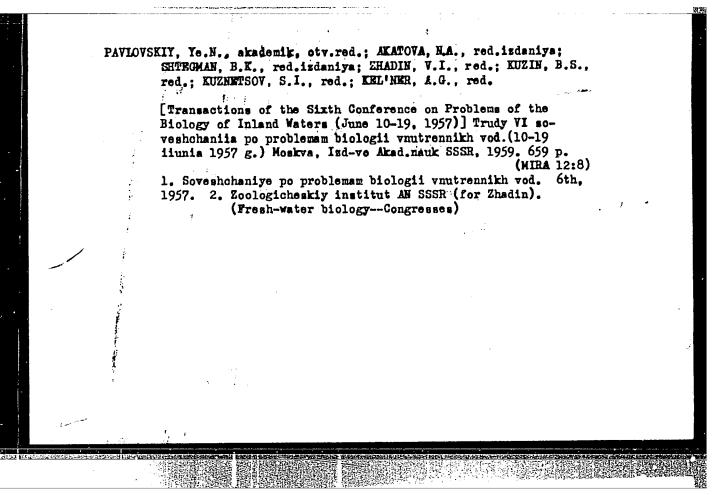


overs cascaded the string. At higher voltages, some arcs struck the supporting street pirder, away from the string; at still higher voltages, when dry and wet

KELNAR, O., inz. CSc.; PLECHANOVA, M., inz. CSc.; KRUPKOVA, B.

Use of silicone coatings for improving the breakdown atrength of surface insulators of high voltage and extra high voltage lines and switch plants in surroundings polluted with dust and chemically aggressive substances. Energetika Cz 14 no.10:483-485 0 164.

l. Laboratory of Extra High Voltage of the Institute of Power Engineering, Bechovice.



AUTHORS:

Kel'ner, A.I. and Kogan, G.B.

SOV-90-58-10-8/9

TITLE:

Experience Gained on the Adjusting of an Automatic Device for the Regulating of Combustion in Boilers Working on Liquid Fuel (Iz opyta naladki avtomatiki goreniya kotlov na zhidkom toplive)

PERIODICAL:

Energeticheskiy byulleten', 1958, Nr 10, pp 25 - 31 (USSR)

ABSTRACT:

The authors describe a system of automatic regulation of the combustion in boilers of the Krasnovodsk Thermo-electric Power Station. The basic feature of this project was that the regulators worked in series. In the system, a regulating column was also installed on the fuel valve to regulate variations in pressure. However, during the process of making adjustments, carried out by Kavteplokontrol' and a representative of PKB-12, grave defects were revealed. It was impossible to get the valves of the pressure and fuel regulators to work steadily, or to achieve the necessary ratio of fuel to air due to the lack of sensitivity of the KRV (regulating column). Under the new system proposed by the factory, the pulse going to the KRV is governed not by the position of the fuel valve but by the consumption of mazut. The authors then give a detailed description of the adjusting processes. A lengthy account of the results of

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SOV-90-58-10-8/9

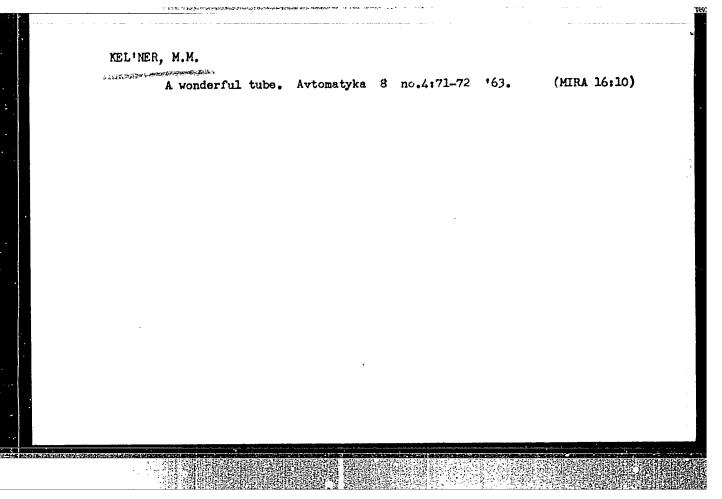
Experience Gained on the Adjusting of an Automatic Device for the Regulating of Combustion in Boilers Working on Liquid Fuel

> the test then follows. The authors finally give the following conclusions. The characteristics must be taken for each boiler separately and the air impulse rheostats must be constructed individually. The results of the test showed that the scope of regulation reaches 50%, the burners being switched off manually. There are 9 graphs, one table, one flow chart, one diagram, one circuit diagram and one Soviet reference.

- 1. Boilers--Control systems 2. Fuels--Control systems
- 3. Control systems -- Performance

Card 2/2

Inreference to the article "Engagement circuits for fuel regulating columns in boilers operating on fuel oil." Elek; sta. 29 no.5:88
My '58. (Boilers)



KEL'NER, N.A

70-4-8/16

AUTHORS: Vertaner, V.N., Kel'ner, N.A. and Solov'yev, A.M.

TITLE: The Formation of Oxides in Lead Sulphide Films and Photoresistances. (Obrazovaniye okislov v serhistosvintsovykh sloyakh i fotosoprotivleniyakh).

PERIODICAL: Kristallografiya, 1957, Vol.2, Nr 4, pp.497-502 (USSR)

ABSTRACT: Electronographic investigations of PbS sublimates, obtained in the form of thin unsupported films and as layers of about 1 a thickness on glass, showed that when in thin layers PbS transforms at 340° to a stable oxide, which has the lanarkite lattice, but which differs from it in composition. At 450° and above PbS goes to another stable oxide 4PbO.PbSO4. The rate of oxidation depends on the temperature and on the type of sublimate. The formation of an oriented layer of lanarkite, the crystals of which on subsequent heating lose their orientation precedes the formation on the surface of a film of PbO2 and PbO.PbSO4. The appearance of sub-layers, richer in PbO, proceeds after the formation of the layer which usually occurs in the surface structure of sensitive photoresistances. The differences observed in the course of cridation of the free films and the sublimates of PbS on glass are most probably conditioned by the differences in the thickness and structure of the layers and the

ACC NR. AP7005445 SOURCE CODE: UR/0367/66/004/003/0641/0645 -
AUTHOR: Keliner, S. R.
ORG: Moscow Engineering-Physics Institute (Moskovskiy inzhenerno-fizicheskiy institut)
TITLE: Formation of omega -meson in the coulomb field of a nucleus
SOURCE: Yadernaya fizika, v. 4, no. 3, 1966, 641-645
TOPIC TAGS: pi meson, Coulomb field, omego meson
ABSTRACT: The spin structure of the amplitude for the production of an ω^o -meson by a π -meson in the Coulomb field of a nucleus is analyzed for large energies. It is assumed that for s-> ω all helicity amplitudes in the t-channel depend on s in the same way. The polarization parameters of the ω^o -meson are calculated. The author thanks Yu. P. Nikitin and Ye. D. Zhizhin for his interest in this work. Orig. art. has: 23 formulas. [JPRS: 28,764]
SUB CODE: 20 / SUBM DATE: 20Nov65 / ORIG REF: 004 / OTH REF: 004
Card 1/1

s/081/62/000/012/035/063 B166/B101

AUTHORS:

Mambetov, A. A., Rzayeva, N. A., Kel'ner, Ye. S.

TITLE:

Study of the solubility of calcined finely disperse niobium pentoxide in sulfuric acid as a function of its concentration

and temperature

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 12, 1962, 376, abstract 12K14 (Uch. zap. Kirovabadsk. ped. in-t, no. 8, 1961, 91-99)

TEXT: In an investigation of the process of dissolution of Nb205 in solutions of H2SC4 with a concentration of 50.5-93.55 at temperatures of 30-310°C it was established that at 30-120°C the given Nb₂0₅ preparation does not interact with H2SO4 solutions, but an insignificant quantity of it is entrained by the H2SO4 solution or peptized. Commencing from a temperature of 120-240°C, the dissolution of the given preparation in H2SO4 solutions is accompanied by chemical interaction of the Nb2O5 with Card 1/2

Study of the solubility of ...

S/081/62/000/012/035/063 B166/B101

the H₂SO₄ forming niobium sulfate. There is almost no change in the solubility of niobium sulfate with change in temperature, which promotes constancy of Nb₂O₅ concentration in the liquid phase both in hot and in cold solutions. On the basis of these investigations the decomposition of niobium-containing ores is carried out at 150-180°C with an 80-85% solution of H₂SO₄ by heating for 4 hours. 10 references. [Abstracter's note: Complete translation.]

Card 2/2

KEL'NER, Yu. G. --

"A Map, Natural Cordi locs in the U.Sh., for Geographical Faculties of higher kineational Institutions." Cand Geog Sci, Moscow State U, Moscow 1954. (EZhGeol, Cot 54)

Survey of Scientific and Temmical Dissertations Defended at UNDER Mignar Elemetional Institutions (10)

30: Sum. No. 481, 5 May 55

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721510015-9"

KEL'NER Yu. G

ISSIEDOVANIYA PO KARTCGRAFTI Ed. Bashlavina, g. N. Research in Cartography, Moscow, Geodezizdat, 1957, 97 p. (Its: Trudy, 27% p. 117)

Table of Contents:

Kel'ner, Yu. G., Candidate of Geographical Sciences; Lozinova, V. M. Candidate

of Technical Sciences; Naumova, A. I. Experiments in Making Composite

Physicogeographic Maps of the USSR for Use in Schools of Higher Learning p.39

The author emphasizes the importance for schools of higher learning, of composite landscape maps, i.e. maps showing all the topographic features of the given region. As an example, the author describes the map "Prirodnyye usloviye SSSR," scale 1:4,000;000,intended to show natural conditions of the country as a whole. This map was prepared in 1950-53 in the cartographic division of the Central Scientific Research Institute of Geodesy, Aerial Photography and Cartography. In 1943-47, the study and preparation of composite maps in the Institute of Geography of the Academy of Sciences was led by Gerasimov, I. P. and Lavrenko, Ye. M. Analytical landscape maps were also complied by students of Moscow and Leningrad Universities. The author commends Ivanov, N. N. for introducing a better method of showing the amount of humidity in a given area by using different colors. The article contains suggestions on how to deal with various types of vegetation (e.g., coniferous forests) and with phenomena like drainage or evaporation in the preparation of a composite map. There are 18 drawings and 8 Soviet references.

Card 4/7 Cent. Sci Res. Inst. Geodesy, Aerial Photography and Cartography Sponsoring Agency: Glavnoye upravleniye geodezii i kartografii MVD SSR

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721510015-9"

.G., kand. geogr. nauk; LOZINOVA, V.M., kand. tekhn. nauk; NAUMOVA, KEL! NER A.I.

YU. G.

On the compilation of complex physical geographic maps of the U.S.S.R. used in college review courses. Trudy TSNIIGAIK no.117:39-55 157. (MIRA 10:12) (Physical geography--Maps)

FILIPPOV, Tu.V.; KEL'NER, Yu.G.; BYUSHDERS, L.M.; SHAMAROVA, T.A., red.iz-va; ROMAROVA, V.V., takhn.red.

[Landscape maps in foreign reference atlases covering various aspects of countries and regions]Karty prirody v zarubezhnykh kompleksnykh spravochnykh atlasakh; gosudarstv i raionov. Moskva, izd-ve geodez. lit-ry, 1958. 146 p. (Leningrad, TSentral'nyy nauchno-issledovatel'skii lit-ry, 1958. aeros*emki i kartografii. Trudy, no.125) (MIRA 11:10)

(Maps)

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3(2)

SOV/10-59-4-21/29

AUTHORS:

Byushgens, L.M., Gurari, Ye.L., and Kel'ner, Yu.G.

TITLE:

Comprehensive Atlas of Belorusskaya SSR

PERIODICAL:

Izvestiya Akademii nauk SSSR, Seriya geografiches-kaya, 1959, Nr 4, pp 142-146 (USSR)

ABSTRACT:

This is a review of the above-mentioned atlas published by the Akademiya nauk BSSR (AS Belorusskaya SSR) and Glavnoye upravleniye geodezii i kartografii MVD SSSR (Central Administration of Geodesy and Cartography MVD USSR), Minsk and Moscow, 1958.

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APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721510015-9"

FILIPPOV, Yu.V.; KEL'NER, Yu.G.; BYUSHOENS, L.M.; HASHLAVIN, V.A.; SHAMAROVA, T.A., red.izd-va; ROMANOVA, V.V., tekim.red.

[Problems in planning the section of nature maps in complex atlases of republics, territories, and provinces of the U.S.S.R.] Voprosy proektirovaniia razdela kart prirody kompleksnykh atlasov respublik, kraev i oblastei SSSR. Moskva, Isd-vo geodez. lit-ry, 1960. 124 p. (Leningrad. TSentral'nyi nauchnogeodez. lit-ry, 1960. 124 p. (Resia-Maps, Physical)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721510015-9"

BONDARCHUK, V.G., akademik, otv. red.; KOROLEVA, M.A., glav. red.;
KOCHUEY, A.D., red.; RADUL, M.M., kanl. geogr. nauk, red.;
BILYK, G.I., kand.biol. nauk, red.; GEYDEMAN, T.S., kand.
biol. nauk, red.; ZAMORIY, P.K., doktor geol.-min. nauk, prof.,
red.; KUGUKALO, I.A., kand. ekon. nauk, starshiy nauchnyy stor.,
red.; MARINICH, A.M., dotsent, red.; MUKOMEL', I.F., kand. geogr.
nauk, starshiy nauchnyy sotr., red.; PRIKHOT'KO, G.F., kand.
geogr. nauk, red.; ROMANENKO, I.N., akademik, red.; TAL'NOVA,
N.N., red.; BYUSHGENS, L.M., kand. geogr. nauk, retsenzent;
DIDKOVSKIY, I.Ya., kand. geol.-miner. nauk, retsenzent;
KEL'NER, Yu.G., kand. geogr. nauk, retsenzent; NADEZHIN, P.F.,
retsenzent; NIKISHOV, M.I., doktor tekhn. nauk. retsenzent:
PIDOPLICHKO, I.G., retsenzent; KURDINA, C.P., red.-kartograf;
RACHINSKAYA, Z.P., red.-kartograf; SLEPTSOVA, L.M., redaktorkartograf.

[Atlas of the Ukrainian S.S.R. and the Moldavian S.S.R.] Atlas Ukrainskoi SSR i Moldavskoi SSR. Moskva, 1962. vi p. 90 p. of col.maps. (MIRA 15:5)

(Continued on next card)

BONDARCHUK, V.G .-- (continued) Card 2.

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye geodezii i kartografii. 2. Akademiya nauk USSR, direktor Instituta geologicheskikh nauk Akademii nauk USSR (for Bondarchuk). 3. Nachal'nik kartosostavitel'skogo tsekha fabriki No.1 (for Koroleva). 4. Zamestitel' predsedatelya Gosudarstvennogo planovogo komiteta Soveta Ministrov USSR (for Kochubey). 5. Direktor Instituta ekonomiki Akademii nauk Moldavskoy SSR (for Radul). 6. Zamestitel' direktora po nauchnoy rabote Instituta botaniki Akademii nauk USSR (for Bilyk). 7. Direktor Botanicheskogo sada Akademii nauk Moldavskoy SSR (for Geydeman). 8. Zaveduyushchiy kafedroy geomorfologii Kiyevskogo gosudarstvennogo universiteta (for Zamoriy). 9. Institut ekonomiki Akademii nauk USSR (for Kugukalo). 10. Zaveduyushchiy kafedroy fizicheskoy geografii Kievskogo gosudarstvennogo universiteta (for Marinich). 11. Ukrainskiy nauchno-issledovatel'skiy institut ekonomiki i organizatsii sel'skogo khozyaystva (for Mukomel'). 12. Direktor Ukrainskogo nauchno-issledovatel'skogo gidrometeorologicheskogo instituta (for Prikhot'ko). (Continued on next card)

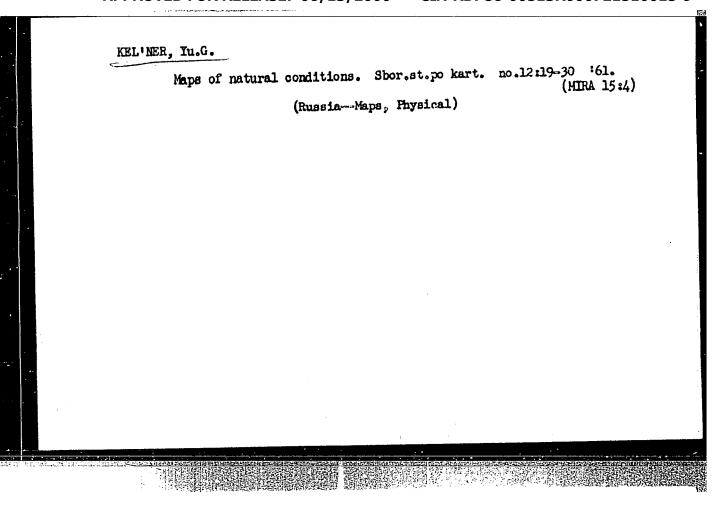
BONDARCHUK, V.G. -- (continued) Card 3. 13. Direktor Ukrainskogo nauchno-issledovatel'skogo instituta ekonomiki i organizatsii seliskogo khozyaystva, Chlen-

korrespondent Vsesoyuznoy akademii sel'skokhozyaystvemnykh nauk im. V.I.Lenina (for Romanenko). 14. Direktor fabriki No.1 (for Tal'nova). 15. Chlen-korrespondent Akademii nauk USSR (for Pidoplichko).

(Ukraine-Maps)

(Moldavia-Maps)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721510015-9"



REL'NER, Yu.G.; YEFIMENKO, Ye.I.

Project of an Atlas of Antarctica. Geod. i kart. no.8:55-58
(MIRA 16:9)

(Antarctica-Maps)

L 32641-66 EWT(1) JXT(CZ)/GW

ACC NR: AP6016922

SOURCE CODE: UR/0006/66/000/005/0073/0076

AUTHORS: Keliner, Yu. G.; Nikishov, M. I.

B

ORG: none

TITLE: The second scientific and technical conference on <u>cartography</u> [held in Leningrad from 26 to 29 January 1966]

SOURCE: Geodeziya i kartografiya, no. 5, 1966, 73-76

TOPIC TAGS: cartography, geographic conference, industrial development, economic geography

ABSTRACT: The second scientific and technical conference on cartography was called by the Geographical Society of the SSSR (Geograficheskiy obshchestvo SSSR) in Leningrad on Jan. 26—29, 1966. More than 300 individuals participated, from all parts of the Soviet Union, representing many different universities, institutes, societies, and other organizations, and covering many different fields of related study: geodesy, geology, hydrology, geophysics, geography, and botany. Seventy reports by individuals from 30 different organizations were given: 20 at a plenary session, 17 at a symposium on Maps of Natural Conditions and Natural Resources, 16 at a symposium on Socio-geographic Maps, and 17 at a joint meeting of the two symposia. Four basic problems received most attention at the conference: 1) organization of thematic mapping, 2) mapping natural features and natural resources,

Card 1/2

Card 2/2

APPROVEDE DE COMES LE COMES DE LA COMESTA DE COMESTA DE

POLISHCHUK, L.K.; SENKEVICH, P.K. [Senkevych, P.K.]; KEL'NIK, M.P. [Kel'nyk, M.P.]

Studying the state of chloroplasts in the walnut bark (Juglans L.) in winter and spring. Ukr.bot.zhur. 16 no.3:32-41 159.

(MIRA 12:8)

1. Kiyovskiy gosudarstvennyy universitet im. T.G. Shevchenko, kufedra fiziologii rasteniy.
(Kiev--Walnut) (Bark) (Chromatophores)

PAKHALUYEV, Donstantin Mikhaylovich; URUSHEV, Konstantin Vasil'yevich;
TOLSTIKH, F.S., redaktor; KEL'NIK, V.P., redaktor; KOVALEHKO, H.I.,
teknnicheskih redaktor

[Heating furnace welder] Svarshchik nagravatel'nykh pechei. Sverilovsk, Gos. nauchno-tekhn. isd-vo lit-ry po chernoi i tsvetnoi
metallurgii, Sverdlovskoe otd-nie, 1954. 183 p. (MLRA 8:6)

(Furnaces--Welding)

KRASOVSKIY, S.A.: KONEVKIN, I.I.; TATARCHEVSKIY, V.F., redaktor; KEL'NIK. Y.P., redaktor; KOYALENKO, K.I., tekhnicheakiy redaktor.

[Rapid repair of open-hearth furnaces] Skorostnye remonty martenovskikh pechei. Sverdlovek, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1954. 196 p.

(Open-hearth process)

(Open-hearth process)

RELINIK, V.P.

BOROMHOVICH, Aleksandr Isaakovich; MOSYHEV, Boris Aleksandrovich; TSITSIN,

M.A., redaktor; MEL'HIK, V.P., redaktor;

KOVALENKO, H.I., tokhnichsskiy redaktor

[Testing and adjusting piston compressors in mines] Ispytanie i

naladka porshnevykh kompressorov na rudnikakh. Sverdlovsk, Gos.

nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi netallurgii,

1954. 212 p.

(Air compressors) (Mining machinery)

(Air compressors) (Mining machinery)

POLITEV, Vladimir Kirillovich; SMOL'NIKOV, Lev Petrovich; SHPUNBERG, Ya.N. kandidat tekhnicheskikh nauk, retsenzent; KEL'NIK, V.P., redaktor; BELYAYEV, M.V., kandidat tekhnicheskikh nauk, retsenzent; KOVALENKO, N.I., tekhnicheskiy redaktor

[Electrical equipment for metallurgical shops] Elektrooborudovanie metallurgicheskikh tsekhov. Sverdlovsk, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetroi metallurgii. 1954. 486 p.(MLRA 8:5) (Metallurgical plants-Electric equipment)

TURUTA, N.U., kandidat tekhnicheskikh nænk; UTKIN, L.A., redaktor; KELLNIK, V.P., redaktor; KOVALENKO, N.I., tekhnicheskiy redaktor.

[Drilling and blasting operations; a textbook for mine foremen]

Buro-veryvnye raboty; uchebnoe posobie dlia shkol i kursov masterov. Izd. 2-e, perer. i dop. Sverdlovsk, Gos. nauchno-tekhn. izdvo lit-ry po chernoi i tevetnoi metallurgii, 1954. 600 p.[Microfilm]

(Blasting) (Rock drills)

(MIRA 8:2)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721510015-9"

KEL'NIK, V. P.

ROZHHUMOV, Vladimir Aleksandrovich; QML'D, P.V., doktor tekhnicheskikh nauk, professor, redaktor; KEL'HIK, V.P., redaktor; KOVALEMKO, N.I., tekhnicheskiy redaktor:

[Thermodynamics of metallurgical slag; statistical thermodynamics of ion solutions and their application of metallurgical slag]

Termodinamika metallurgicheskikh ehlakov; statisticheskia terminodinamika ionnykh rastvorov i primenenie ee k metallurgicheskim shlakam. Sverdlovsk, Gos.nauchno-tekhn.isd-vo lit-ry po chernoi i tsvetnoi metallurgii, Svordlovskoe otd-nie, 1955.

162 p. (Slag)

(Slag)

POLTEV, Vladimir Kirillovich; SMOL'NIKOV, L.P., redaktor; KEL'NIK, V.P. redaktor; KOVALENKO, N.I., tekhnicheskiy redaktor.

[Electrician of the metallurgical shop] Elektrik metallurgicheskogo tsekha. Izd. 2-e, perer. i dop. Sverdlovsk, Gos. nauchno-tekhn. isd-vo lit-ry po chernoi tsvetnoi metallurgii, Sverdlovskoe otd-nie, 1955. 244 p.

(MLRA 8:8)

(Metallurgical plants--Electric equipment)

HERE

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721510015-9"

ARISTOV, Gleb Georgiyevich; OGARKOV, A.F., redaktor; V.P.KEL'NIK, redaktor; KOVALENKO, H.I., tekhnicheskiy redaktor.

[Technical control in the production of refractory material; manual for a course for specialists] Tekhnicheskii kontrol' proizvodstva ogneuporov; uchebnoe posobie dlia kursov masterov. Sverdlovsk, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, Sverdlovskoe otd-nie, 1955.276 p.

(Refractory materials)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721510015-9"

ANIREYEV, Yevgeniy Timofeyevich; SHCHUKIN, Aleksandr Semenovich; SAUKHAT, I.G., redaktor; KEL'MIK, V.P. redaktor; KOVALENKO, N.I., tekhnicheskiy redaktor;

[The miner] Prokhodchik gornykh vyrabotok; uchebnoe posobie dlia shkol i kursov masterov gornorudnykh predpriiatii. Sverdlovsk, Gos. nsuhono-tekhn. isd-vo lit-ry po chernoi i tsvetnoi metallurgii, Sverdlovskoe otd-nie, 1955. 320 p. (MIRA 9:4)

(Mining engineering)

FOLTEV, Vladimir Kirillovich; SMOL'NIKOV, Lev Petrovich; ZOTOV,
N.P., redaktor; BURDE, L.V., redaktor; KRAPIVIN, G.B.,
redaktor; KEL'NIK, V.P., redaktor; KOVALENKO, N.I.,
tekhnicheskiy redaktor;

[Reference manual for electricians in metallurgical plants]
Spravochnoe rukovodstvo elektrika metallurgicheskog savoda.
Sverdlovsk, Gos.nauchno-tkhn.isd-vo lit-ry po chernoi i
tsvetnoi metallurgii, Sverdlovskoe otd-nie, 1955. 456 p.
(Electric machinery-Maintenance and (MLRA 8:12)
Repair) (Metallurgical plants)

KELNIKY YIP.

MIKHAYLOV, V.V., doktor tekhnicheskikh nauk, professor, redaktor; @RUZIHOV, Vladimir Konstantinovich, kandidat tekhnicheskikh nauk, redaktor: POPEL', Stanislav Iosifovich, kandidat tekhnicheskikh nauk; KEL'HIK, V.P., redaktor; ZBF, Ye.M., tekhnicheskiy redaktor

[Physical and chemical principles of the blast furnace process and the modern method of producing cast iron; transactions of a conference convoked by the Metallurgical Institute of the Ural Affiliate of the U.S.S.R. Academy of Sicence, March 23-27, 1855] Fiziko-khimicheskie osnovy domennogo protsessa i sovremennaia praktika proizvodstva chuguna; trudy soveshchaniia, sosvannogo Institutom metallurgii Ural'skogo filiala AN SSSR i Magnitogorskim metallurgicheskim kombinatom, 23-27 marta 1955 g.g. Magnitogorsk. Pod red. V.V.Mikhailova. Sverdlovsk, Gos.nauchno-tekhn. izd-vo lit-ry po chernoi i tavetnoi metallurgii, Sverdlovskoe otd-nie, 1956. 403 p. (MLRA 10:3)

1. Akademiya nauk SSSR. Ural'skiy filial, Sverdlovsk. Institut metallurgii.

(Blast furnaces) (Cast iron--Metallurgy)

SHVEYKIN, Viktor Vasil'yevich, professor; TYAGUNOV, Vladimir Arkad'yevich, dotsent; GERMANOV, N.A., redaktor; KEL'NIK, V.P., redaktor; KOVALENKO, N.I., tekhnicheskiy redaktor.

[Technology of rolling] Tekhnologia prokatnogo proizvodstva. Sverd-lovsk, Gos.nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, Sverdlovskoe otd-nie, 1956. 444 p. (HIRA 9:6) (Rolling (Metalwork))

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721510015-9"

GEL'D, Pavel Vladimirovich; YESIN, Oleg Aleksandrovich; YUR'YEV, B.N., red.; KEL'NIK, V.P., red.; ZEF, Ye.M., tekhn.red.

[Processes of high-temperature metal reduction] Proteessy vysokotemperaturnogo vosatanovleniia. Sverdlovsk, Gos.nauchnotekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, Sverdlovskoe otd-nie, 1957. 646 p. (WIRA 11:1)

(Metallurgy)

BISK, Matvey Borisovich; KEL'NIK, V.P., red.; KRYZHOVA, M.L., red.izd-ve; TURKINA, Ye.D., tekhn.red.

[Efficient technology for the manufacture of tube-drawing equipment] Ratsional neis tekhnologiia isgotovleniia trubovolochil nego instrumenta. Sverdlovsk, Gos.nauchno-tekhn. isd-vo lit-ry po chernol i tsvetnoi metallurgii, Sverdlovskoe otd-nie, 1960. 74 p.

(Drawing (Metalwork)) (Dies (Metalworking))

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721510015-9"

KOFF, Zusya Abramovich; SOLOVEYCHIK, Petr Mikhaylovich; ALESHIN,
Vladimir Arkad'yevich; GRINSHPUN, Mark Izrailevich; KEL'NIK,
V.P., red.; SYRCHINA, M.M., red. izd-va; MAL'KOVA, N.T.,
tekhn. red.

[Cold rolling of pipe]Kholodnaia prokatka trub.[By]Z.A.Koff
i dr. Sverdlovsk, Metallurgizdat, 1962. 431 p.
(MIRA 15:8)

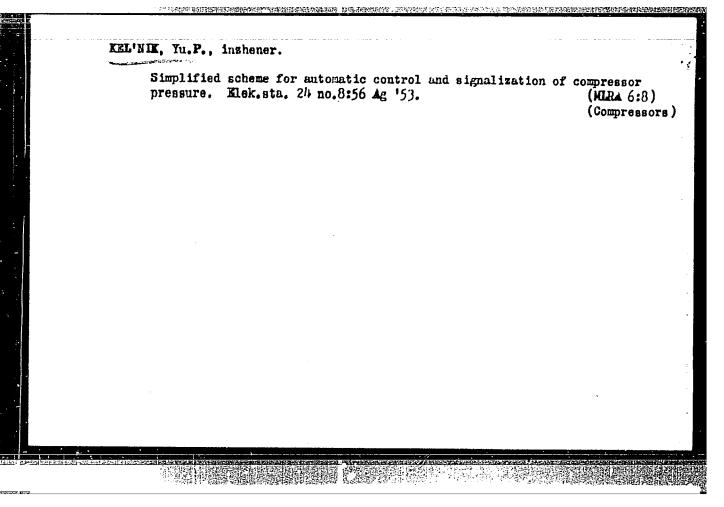
(Rolling(Metalwork)) (Pipe, Steel)

SHURUPOV, Anatoliy Konstantinovich; FREYBERG, Mark Aronovich; KOLMAGOROV, V.L., retsenzent; KEL'NIK, Valentin Prokop'yevich, red.; CHAPAYKINA, F.K., red.izd-va; MATLYUK, R.M., tekhn. red.

[Production of economical shape tubes]Proizvodstvo trub ekonomichnyth profilei. Sverdlovsk, Metallurgizdat, 1963. 296 p. (MIRA 16:2)

(Tubes) (Pipe mills)

- KEL'NIK, YU. P. Eng.	
Electric Switchgear	
Improving the control of an automatic field extinguis	sher. Elek. stn. 23 No. 2, 1953.
9. Monthly List of Russian Accessions, Library of C	Onoress. June 1953 Unclassified



POLAND / General Problems of Pathology. Immunity.

U

Abs Jour: Ref Zhur-Biol., No 9, 1958, 41876.

Author : Kelns, A.

Inst : Not given.

Title : Immunological Vegetative Approach.

Orig Pub: Wszechswiat, 1956, No 6, 141-142.

Abstract: No abstract.

Card 1/1

11

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721510015-9"

sov/70-4-4-22/34

Boyarskaya, Yu.S., Keloglu, Yu.P., Bologa, M.K. and AUTHORS:

Medenets, V.V.

A Study of the Dependence of Microhardness on Loading TITLE:

in Single Crystals of NaCl

Kristallografiya, 1959, Vol 4, Nr 4, pp 597-602 PERIODICAL:

+ 1 plate (USSR)

The microhardness of natural NaCl crystal, freshly ABSTRACT:

cleaved and artificially coloured, was measured with a PMT-3 microhardness tester as a function of load. Loads up to 100 g were used. Up to 122g the hardness increased steadily from 20 to 24 kg/mm but by 25 g the

hardness has returned to about 21 kg/mm². Crystals uncol-

oured, those coloured in various ways and those decolourised behave in substantially the same way. reaction pressure of the imprint mark for an elastic

crystal is treated theoretically and experimentally. The elastic reaction of impressions is shown to be a small effect and shows no influence on the measurement

of the microhardness. This reaction also has no

Card1/2

SOV/70-4-4-22/34 A Study of the Dependence of Microhardness on Loading in Single Crystals of NaCl

influence on the anisotropy of the formation of the imprints on the (100) faces of NaCl. Near the edges of the imprints bulging and denting of the material is found, which does have a substantial influence on the measurement of the microhardness. There are 7 figures, 1 table and 13 references, of which 11 are Soviet and 2 German.

Kishinevskiy universitet (Kishinev University) ASSOCIATION:

June 21, 1958 SUBMITTED:

Card 2/2

24.7400

78105 sov/70-5-1-14/30

AUTHORS:

TITLE:

Boyarskaya, Yu. S., Keloglu, Yu. P., Bologa, M. K.,

Dunayeva, S. M.

Study of the Effects of Some Factors on the Hardness

of KCl and NaCl Single Crystals

PERIODICAL:

Kristallografiya, 1960, Vol 5, Nr 1, pp 98-104 (USSR) Some

ABSTRACT:

Numerous experiments by various authors are cited. of them produced contradictory results and made further studies necessary. The (100) faces of two sets of KCl crystals were etched for different periods with water and tested for the indentation and scratching hardnesses. Both values at first increased with duration of etching for 2-3 min but dropped again to usual values on still further etching. Polishing of (100) faces in saturated KCl solution on a cloth also increased the hardness with time duration for the first 2 min and reduced again on still further duration.

However, no hardness increase was evident when specimens were polished with iron oxide instead of KCl

Card 1/3

CIA-RDP86-00513R000721510015-9" APPROVED FOR RELEASE: 06/13/2000

Study of the Effects of Some Factors on the Hardness of KCl and NaCl Single Crystals 78105 sov/70-5-1-14/30

solution. Thus, impregnation of the surface layer with water is believed to be the principal reason for the hardness increase. The reason for its drop with further treatment may be related to the healing of dislocations because of the intermediary action of the impregnating water. The healing as such increases and stabilizes the surface hardness but at the same time eliminates the internal stresses around former dislocations and, consequently, the additional hardness caused by these stresses. To check this concept the authors tested NaCl crystals which a priori had different degrees of structure distortions and obviously required different periods for the healing of their defects. The structure distortions, produced by a repeated alternation of coloring and bleaching procedures, proved to alter the surface hardness of crystals to such a small extent that the hardness changes during the experiments remained within the limits of possible errors. However, longer periods of etching to achieve the maximum surface hardness of more

Card 2/3

Study of the Effects of Some Factors on the Hardness of KCl and NaCl Single Crystals 78105 sov/70-5-1-14/30

intensively distorted crystals were obvious. M. V. Klassen-Neklyudova and V. L. Indenbom are acknowledged for advice. There are 6 figures; 4 tables; and 10 references, 8 Soviet, 1 German, and 1 Russian translation of a U.K. paper (by A. H. Cottrell).

ASSOCIATION:

Kishinev State University (Kishinevskiy gosudarstvennyy

universitet)

SUBMITTED:

July 16, 1959

Card 3/3

69878

S/032/60/026/04/25/046 B010/B006

24.7500 authors:

Boyarskaya, Yu.S., Keloglu, Yu.P., Lapsker, Yu.O.

TITLE:

The Influence of Elastic Indentation Recovery on the Dependence

of the Microhardness on the Load

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol. 26, No. 4, pp. 477-480

TEXT: Most investigators assume that the elastic recovery of indentations is independent of their dimensions. B.W. Mott (Ref. 1), however, assumes the contrary. The magnitude of elastic recovery, however, must be determined. If it is small in comparison to the dimensions of the indentation, the influence of elastic recovery on the microhardness may be neglected. In this connection, the authors of the present paper carried out investigations using KCl- and aluminum single crystals. Since the moduls of elasticity of both substances are similar, the elastic recovery may be expected to be of similar magnitude. The microhardness was measured by the PMT-3 apparatus. The results are represented graphically (Fig. 1). Elastic recovery was measured by the same apparatus and by means of a metallographic microscope. It was found that the

Card 1/2

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721510015-9"

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69878

The Influence of Elastic Indentation Recovery on the Dependence of the Microhardness on the Load

S/032/60/026/04/25/046 B010/B006

elastic recovery of the indentations is so slight (0.5μ) that it lies within the limit of measuring error. The above-mentioned assumption by B.W. Mott is proved to be correct, i.e. that the elastic recovery has no influence on the dependence of the microhardness on the load. It is shown in a table that elastic recovery at $P = 100 \text{ g/mm}^2$ only amounts to several microns, and to some ten microns at $P = 500 \text{ g/mm}^2$. It is found that the anisotropy of the shape of indentations is due not to the anisotropy of the elastic-, but of the plastic properties of the crystal. This is in agreement with the statements of V.K. Grigorovich (Ref. 5). There are 3 figures, 1 table, and 5 references, 3 of which are Soviet.

ASSOCIATION: Kishinevskiy gosudarstvennyy universitet (Kishinev State University)

Card 2/2

STRUCTURE OF THE SECOND SECOND

S/032/61/027/001/033/037 B017/B054

AUTHOR:

Keloglu, Yu. P.

TITLE:

Device for Making Samples of Varying Composition Used in

Radiography

PERIODICAL:

Zavodskaya laboratoriya, 1961, Vol. 27, No. 1, pp. 114-115

TEXT: The author developed a high-vacuum apparatus for X-ray structural analyses of samples of varying composition. The base plate on which the samples are condensed consists of fine glass capillaries 1.5-1.0 mm in diameter and 15 mm long. The condensate is 1.5-2 mm thick. A special 30-40 v current source is used to heat the base plates. The method suggested permits X-ray examination by any type of X-ray camera, in particular PKCO(RKSO) and PKOT (RKOP) cameras. Fine films of aluminum, zinc, selenium, and of the compounds Al2Se3, CdTe, Al2Te3, and others, were X-rayed. There are 1 figure and 1 Soviet reference.

ASSOCIATION: Kishinevskiy gosudarstvennyy universitet (Kishinev State

University)

Card 1/1

KATEFORMULENGUNGUNGUN MEMILING

S/076/62/036/011/019/021 B101/B180

AUTHORS:

Keloglu, Yu. P., and Fedorko, A. S.

TITLE:

Metallographic and x-ray diffraction studies of some pseudobinary sections in the system Cd-Zn-Sb

PERIODICAL:

Zhurnal fizicheskoy khimii, v. 36, no. 11, 1962, 2544-2547

TEXT: In the system Gd - Zn - Sb, tentative constitution diagrams were constructed for the pseudobinary sections SbZn - CdSb, $Sb_2Zn_3 - CdSb$, and $Sb_3Zn_4 - CdSb$, powder patterns of the allloys were taken, and their densities were determined. Results: (1) In the section ZnSb - CdSb (Fig. 2), the specimens 1-4 and 9-13 form a continuous series of solid solutions. The powder pattern of specimen 8, which had maximum density showed a hexagonal lattice with c/n = 0.83 - 0.84. It is ascribed the formula $CdZnSb_2$. A hexagonal modification with the lattice constants n = 4.08 kZ, c = 2.358 kZ, c/n = 0.725 was found for CdSb. (2) In the section $Sb_2Zn_3 - CdSb$ (Fig. 3), a compound is formed with 35% CdSb for Card 1/4)

S/076/62/036/011/019/021 B101/B180

Metallographic and x-ray diffraction...

which the composition $CdZn_3Sb_3$ is suggested, but the lattice was not identified. A second compound is probably formed by decomposition of Sb_2Zn_3 into 2SbZn + Zn, and reaction of CdSb with SbZn, since the powder pattern of specimen 12 did not show CdSb or Sb_2Zn_3 lines, while those of specimens 2 and 3 corresponded to Sb_2Zn_3 , and 13, 14, and 15 to CdSb. (3) In the section Sb_3Zn_4 - CdSb (Fig. 4), only a chemical compound with hexagonal lattice, $c/a \sim 0.3$, is formed. For Sb_3Zn_4 , a was found to be 10.7 kX, c = 3.53 kX, c/a = 0.33. There are 4 figures.

ASSOCIATION: Kishinevskiy gosudarstvennyy universitet (Kishinev State

University)

SUBMITTED: April 9, 1962

Card 2/4)

KELOGLU, Yuriy Fetrovich; FEDORKO, Anatoliy Stepanovich; SAMOSUDOV, F. red.

[Radioactive devices and their use in industry] Radioaktivnye pribory, ikh primenenia v promyshlennosti. Kishinev, Kartia moldoveniaske, 1964. 166 p. (MIRA 17:11)

ACCESSION NR: AP4031129

\$/0192/64/005/002/0236/0241

AUTHOR: Keloglu, Yu. P.; Fedorko, A. S.

TITIE: X-ray structural analysis of alloys of the ZnSb-CdSb system.

SCURCE: Zhurnal strukturnoy khimii, v. 5, no. 2, 1964, 236-241

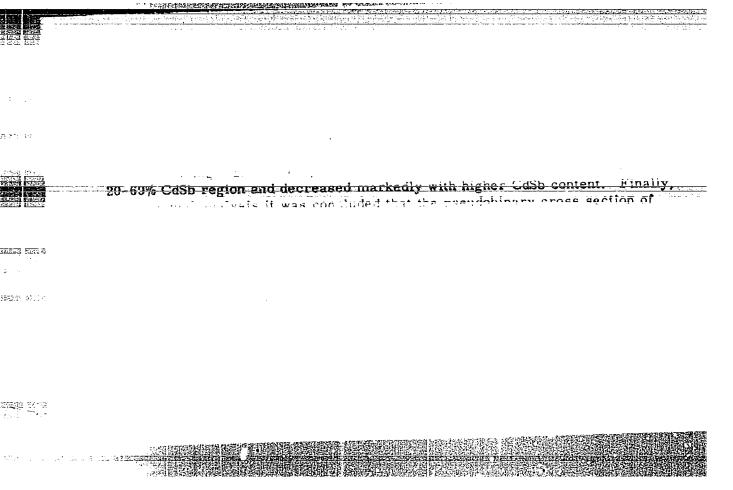
TOPIC TAGS: ZnSb CdSb system, alloy, x ray structure, zinc antimonide containing alloy, calcium antimonide containing system, solid solution, x ray powder diagram, structural parameter, Vegard law, ZnCdSb sub 2, semiconductor, p type semiconductor, electrical conductivity, thermal electromotive force

ABSTRACT: Samples of alloys of the ZnSb-CdSb system in 5 mol.% concentration increments from 0 to 100 mol% CdSb were subjected to x-ray analysis. It was found that all of the alloys are rhombic which led to the assumption of that the alloys are a continuous series of solid solutions. All the x-ray powder diagrams indicate no structural peculiarities among the alloys. Values of all'three structural parameters increased with increase in CdSb content. A deviation from Vegard's law was observed in the 50 mol% CdSb range indicating the formation of an ordered solid solution or chemical compound. However if a chemical compound

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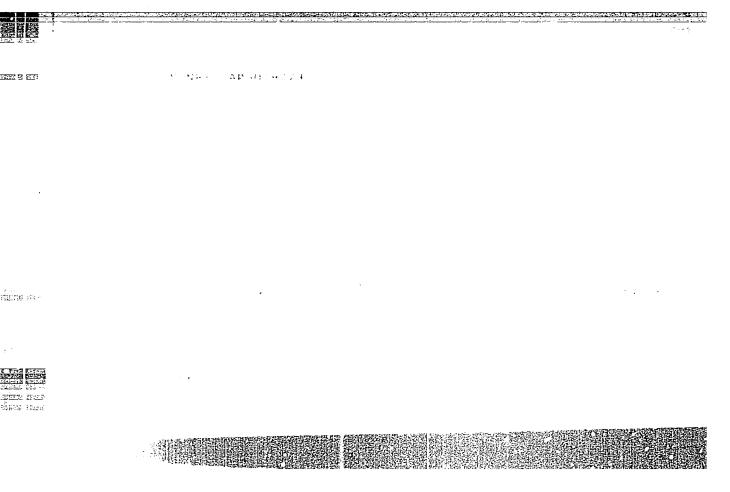
Zhurnai neorganicheskoy khimii. v. 9. no. 8. 1964, 1915-1918

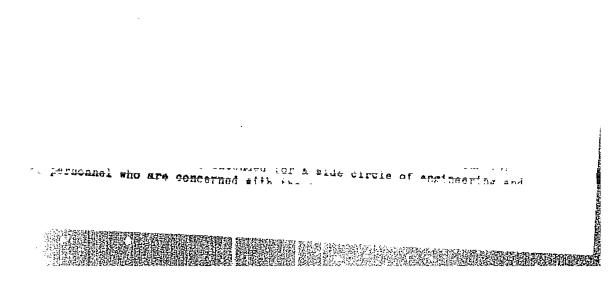


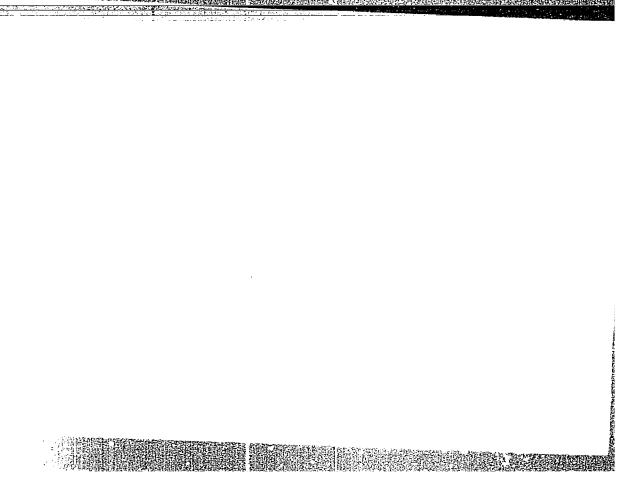


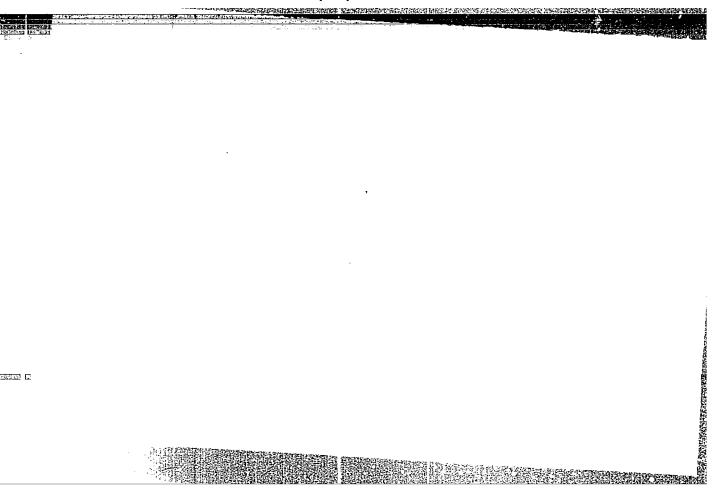
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SOURCE CODE: UR/0058/66/000/009/E030/E030

AUTHOR: Keloglu, Yu. P.; Fedorko, A. S.

TITLE: Properties of ZnSb-CdSb system

SOURCE: Ref. zh. Fizika, Abs. 9E246

REF SOURCE: Uch. zap. Kishinevsk. un-t. v. 80, 1965, 121-132

TOPIC TAGS: cadmium antimonide system, zinc antimonide system, zinc attention, planting system, quantification and compound, antimonide, planting, fluctuarities, electric conduction.

ABSTRACT: Based on a generalization of experimental material, a series of deductions are made relative to the structure and properties of alloys of the quasibinary ZnSb—CdSb system. A phase diagram of this system, constructed on the basis of data from thermal, x-ray, and microstructural investigations and from measurements of density and microhardness, represents a continuous series of solid solutions. The crystallographic group, configuration of the short range order and the type of chemical bonds in the solid solutions are the same as in binary components. It is noted, that besides the stable ZnSb—CdSb system, there also exists a metastable, temperature position of the liquidus and the solidus,

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which is different from that in the stable system. The study of such electrophysical properties as electroconductivity, thermal electromotive force, heat conduction carrier mobility, and carrier activation energy has shown the presence of the extremum of these properties in the ZnCdSb₂ alloy. Although x-rays do not show this alloy to have any structural peculiarities, the authors suggest that it should be considered as a ternary chemical compound, with calculated length of bonds: Zn—Cd 2.93 Å; Sb—Sb 2.81 A; Zn—Sb 2.65 Å; Cd—Sb 2.81 Å. A bibliography with 93 references is included. I. Marchukova. [GC]

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